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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,086	10/12/2001	Christopher Lockton Brandin	NEO-0101	1925

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EXAMINER

ALI, MOHAMMAD

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,086

Applicant(s)

BRANDIN ET AL.

Examiner

Mohammad Ali

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6,9-16 and 19-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to the amendment filed on 09/17/04.

Claims 1-27 are pending in this Office Action

Response to Arguments

2. After further search and a thorough examination of the present application claims 1, 6, 9-16, and 19-27 remain rejected.

Applicants' arguments with respect to claims 1, 6, 9-16, and 19-27 have been considered, but they are not deemed to be persuasive.

First, Applicant's argue that Slaughter and Lipkin do not discuss about "access search result".

In response to the Applicant's arguments the Examiner respectfully submits that Slaughter teaches this limitations as, sending the search results to the client, the search service may store the search results in a results space i.e., a network-accessible storage repository and send the address of the results space to the client. The client then access the search results in the results space at an appropriate time (see col. 44, lines 13-18, Fig. 46a, Slaughter).

Second, Applicant's argue that Slaughter and Lipkin does not teach "access control rule".

In response to the Applicant's arguments the Examiner respectfully submits that Slaughter teaches this limitations as, the publishing device verify its connection to the local device, thus allowing the space to detect when the local device is no longer available. Rules for how the service advertisements are republished may be provided

by the local device or by an administrative policy for the local vicinity (e.g. proximity area) or local network (see col. 61, lines 12-17, Slaughter).

Third, Applicant's argue that Slaughter and Lipkin does not teach "flatten XML document".

In response to the Applicant's arguments the Examiner respectfully submits that Slaughter teaches this limitations as, flat un-related set of advertisements or a graph of related advertisements e.g. commercial database. The distributed computing environment does not dictate how a space actually stores its content, spaces may be supported by small to large devices. A simple space may be tailored to fit on small devices, such as PDAs. More advanced spaces may be implemented on large servers employing large commercial databases. A space may contain advertisements for services in the distributed computing environment. An advertisement may provide a mechanism for addressing and accessing services and/or content within the distributed computing environment. An advertisement specify a URI for a service. The URI allow for the service to be accessible over the Internet. An advertisement includes an XML schema for the service (see col. 36, lines 12-28, Slaughter).

Fourth, Applicant's argue that Slaughter and Lipkin does not teach "intersection operation".

In response to the Applicant's arguments the Examiner respectfully submits that Slaughter teaches this limitations as, using the string structures with the recursive processing allows the processing to be done without creating copies of the subsections "intersection" for processing. Copying of subsections may be particularly costly in

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recursive processing, because as the recursion goes deeper, more and more copies of the same data are made (see col. 80, lines 42-47, Slaughter).

Fifth, Applicant's argue that Slaughter and Lipkin does not teach "sliding window search".

In response to the Applicant's arguments the Examiner respectfully submits that Slaughter teaches this limitations as stated in the office action and Fig. 15.

Fifth, Applicant's argue that Slaughter and Lipkin does not teach "defining a trigger".

In response to the Applicant's arguments the Examiner respectfully submits that Slaughter teaches this limitations as, persistent advertisements may be stored e.g. by an archival service) for future use in a persistent storage location such as a file or a database. A space through the archival procedure may enable advertisements to be stored, however the space does not necessarily play a role in how persisted advertisement entries are actually stored. In order to store in the persistent storage location a database trigger procedure have to applied (see col. 37, lines 31 et seq, Slaughter).

Finally, Examiner explained all the arguments in the detail Office Action.

Hence, Applicants' arguments do not distinguish over the claimed invention over the prior art of record.

In light of the foregoing arguments, the 103 rejections are hereby sustained.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 6, 9-16, and 19-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter et al. ('Slaughter' hereinafter), USP 6,643,650 in view of Daniel S. Lipkin ('Lipkin' hereinafter) USP 6,721,747.

With respect to claim 1,

Slaughter discloses a control method for an extensible markup language file, comprising the steps (see col. 18, lines 13-25) of:

a) receiving a query from a user (client query as to the capabilities of the service without the gate actually sending a message, see col. 27, lines 43-45, Fig. 2, Slaughter);

b) determining an access control rule associated with the user (clients finds the advertisements in a space and use the information from an advertisement to access a service using an XML (eXtensible Markup Language) messaging mechanism of the distributed computing environment. Many spaces exists, each containing XML advertisements that describe services or content. A space repository of XML advertisements of services and/or XML data, which have raw data or advertisements for data, such as results, see co. 8, lines 2-9, Slaughter);

c) performing a query search on the extensible markup language file (the discovery service receive a string specifying something to locate, and it sends an XML message to a known discovery front-end, which then parses the string and makes a corresponding XML query to a search facility which may be an internet search facility, see col. 16, lines 39-46, Fig. 4, Slaughter);

d) storing a query search result (the client access the results or pass them by reference to another service. The space results stored in different from the space in which the service is advertised, see col. 18, lines 23-26, Fig. 9, Slaughter);

e) performing an access search on the extensible markup language file (a result gate generated to access the actual results. The client or client method gate may receive a results URI and perhaps a result XML schema and/or authentication credential for constructing a gate to access the remote method results, see col. 31, lines 26-30 et seq, Slaughter);

f) storing an access search result (the client access the results or pass them by reference to another service. The space results stored in different from the space in which the service is advertised, see col. 18, lines 23-26, Fig. 9 et seq, Slaughter); and

g) comparing the query search result and the access search result to determine an allowed search result (search criteria specified as an XML template document that may be compared (e.g. by the space service) with the advertisements in the space. Published advertisements may represent "on-line" services ready for clients to use, see col. 36, lines 66 to col. 37, lines 3, Slaughter).

Slaughter does not explicitly indicate the claimed "comparing query search result".

Lipkin discloses claimed comparing query search result (having a first set of metadata and a second set of metadata by comparing the first set of metadata with the second set of metadata, dynamically generating a query based on the first set of metadata, and executing the query against the second set of metadata to get the result, see col. 2, lines 22-32, Lipkin).

It would have obvious to one ordinary skill in the data processing art at the time of the present invention to combined the cited references because the comparing query search result of Lipkin's teachings would have allowed Slaughter's system to provide efficiently managing and retrieving information over a network, as suggested by Lipkin at col. 1, lines 38-39. Comparing query search result as taught by Slaughter improves template based query builders that generate optimized SQL queries in the native SQL language of the database (see col. 137, lines 50-52, Lipkin).

As to claim 6,

Slaughter teaches wherein step (a) further includes the step of: a1) converting the query into an execution stack (see col. 26, lines 36-41 et seq).

As to claim 9,

Slaughter teaches wherein step (c) further includes the steps of: c1) flattening the extensible markup language file to form a flattened extensible markup language file (see col. 10, lines 25-34 et seq).

As to claim 10,

Slaughter teaches c2) returning a line number of the flattened extensible markup language file (see col. 9, lines 31-47 et seq).

As to claim 11,

Slaughter teaches g1) performing an intersection between a plurality of line numbers from the query search result and a second plurality of line numbers from the access search result (see col. 18, lines 13-26 et seq).

With respect to claim 12,

Slaughter discloses a control method for an extensible markup language file, comprising the steps (see col. 18, lines 13-25) of:

a) determining an access control rule for a user (clients finds the advertisements in a space and use the information from an advertisement to access a service using an XML (eXtensible Markup Language) messaging mechanism of the distributed computing environment. Many spaces exists, each containing XML advertisements that describe services or content. A space repository of XML advertisements of services

and/or XML data, which have raw data or advertisements for data, such as results, see co. 8, lines 2-9, Slaughter);

b) receiving a query from the user (client query as to the capabilities of the service without the gate actually sending a message, see col. 27, lines 43-45, Fig. 2, Slaughter);

c) performing an access control search against the extensible markup language file to form an access control result (the discovery service receive a string specifying something to locate, and it sends an XML message to a known discovery front-end, which then parses the string and makes a corresponding XML query to a search facility which may be an internet search facility, see col. 16, lines 39-46, Fig. 4, Slaughter);

d) performing a query search against the extensible markup language file to form a query search result (the discovery service receive a string specifying something to locate, and it sends an XML message to a known discovery front-end, which then parses the string and makes a corresponding XML query to a search facility which may be an internet search facility, see col. 16, lines 39-46, Fig. 4, Slaughter); and

e) comparing the access control result and the query search result to determine an allowed search result (search criteria specified as an XML template document that may be compared (e.g. by the space service) with the advertisements in the space. Published advertisements may represent "on-line" services ready for clients to use, see col. 36, lines 66 to col. 37, lines 3, Slaughter).

Slaughter does not explicitly indicate the claimed "comparing query search result".

Lipkin discloses claimed comparing query search result (having a first set of metadata and a second set of metadata by comparing the first set of metadata with the second set of metadata, dynamically generating a query based on the first set of metadata, and executing the query against the second set of metadata to get the result, see col. 2, lines 22-32, Lipkin).

It would have obvious to one ordinary skill in the data processing art at the time of the present invention to combined the cited references because the comparing query search result of Lipkin's teachings would have allowed Slaughter's system to provide efficiently managing and retrieving information over a network, as suggested by Lipkin at col. 1, lines 38-39. Comparing query search result as taught by Slaughter improves template based query builders that generate optimized SQL queries in the native SQL language of the database (see col. 137, lines 50-52, Lipkin).

As to claim 13,

Slaughter teaches a1) creating an access control query statement (see col. 28, lines 65 to col. 29, lines 5 et seq).

As to claim 14,

Slaughter teaches wherein step (b) further includes the step of: b1) converting the query into an executable stack (see col. 26, lines 36-41 et seq).

As to claim 15,

Slaughter teaches wherein step (a) further includes the step of: a1) creating an access control query statement containing a predicate (see col. 21, lines 19-23 et seq).

With respect to claim 16,

Slaughter discloses a control method for an extensible markup language file, comprising the step (see col. 18, lines 13-25) of:

a) performing an access search on the extensible markup language file to form an access search result (the discovery service receive a string specifying something to locate, and it sends an XML message to a known discovery front-end, which then parses the string and makes a corresponding XML query to a search facility which may be an internet search facility, see col. 16, lines 39-46, Fig. 4, Slaughter);

b) performing a query search on the extensible markup language file to form a query search result (the discovery service receive a string specifying something to locate, and it sends an XML message to a known discovery front-end, which then parses the string and makes a corresponding XML query to a search facility which may be an internet search facility, see col. 16, lines 39-46, Fig. 4, Slaughter); and

c) comparing the access search result to the query search result to form an allowed search result (clients finds the advertisements in a space and use the information from an advertisement to access a service using an XML (search criteria specified as an XML template document that may be compared (e.g. by the space service) with the advertisements in the space. Published advertisements may represent "on-line" services ready for clients to use, see col. 36, lines 66 to col. 37, lines 3, Slaughter).

Slaughter does not explicitly indicate the claimed "comparing query search result".

Lipkin discloses claimed comparing query search result (having a first set of metadata and a second set of metadata by comparing the first set of metadata with the second set of metadata, dynamically generating a query based on the first set of metadata, and executing the query against the second set of metadata to get the result, see col. 2, lines 22-32, Lipkin).

It would have obvious to one ordinary skill in the data processing art at the time of the present invention to combined the cited references because the comparing query search result of Lipkin's teachings would have allowed Slaughter's system to provide efficiently managing and retrieving information over a network, as suggested by Lipkin at col. 1, lines 38-39. Comparing query search result as taught by Slaughter improves template based query builders that generate optimized SQL queries in the native SQL language of the database (see col. 137, lines 50-52, Lipkin).

As to claim 19,

Slaughter teaches wherein a1) determining a user's organization (see Abstract et seq);

a2) retrieving an access control rule based on the user's organization (see Abstract).

As to claim 20,

Slaughter teaches wherein (a1) flattening the extensible markup language file (see col. 8, lines 2-20 et seq).

With respect to claim 21,

Slaughter discloses a method of control in an extensible markup language file, comprising the steps (see col. 18, lines 13-25) of:

a) predefining a pattern (the desired name specified in the lookup message may include one or more wildcards. Each of the discovered documents may then have a name that matches the desired name, and the names may identify the discovered documents within the space, see col. 10, lines 40-45 et seq, Slaughter).

b) searching for the pattern (the discovery service receive a string specifying something to locate, and it sends an XML message to a known discovery front-end, which then parses the string and makes a corresponding XML query to a search facility which may be an internet search facility, see col. 16, lines 39-46, Fig. 4, Slaughter); and

c) when a pattern is found, altering the extensible markup language file or creating an extensible markup language document (search criteria specified as an XML template document that may be compared (e.g. by the space service) with the advertisements in the space. Published advertisements may represent "on-line" services ready for clients to use, see col. 36, lines 66 to col. 37, lines 3, Slaughter).

Slaughter does not explicitly indicate the claimed trigger.

Lipkin discloses the claimed trigger (match Agents determine what matches and queries occur under what conditions. Match Agents can be triggered by a request to a web or application server, by specific events, or on a regularly scheduled basis. A Match Agent specifies the RQL and any input metadata to use as the metadata query, see col. 115, lines 60-65, Lipkin).

It would have obvious to one ordinary skill in the data processing art at the time of the present invention to combined the cited references because the triggers of Lipkin's teachings would have allowed Slaughter's system to provide efficiently managing and retrieving information over a network, as suggested by Lipkin at col. 1, lines 38-39. Triggers as taught by Lipkin improves template based query builders that generate optimized SQL queries in the native SQL language of the database (see col. 137, lines 50-52, Lipkin).

As to claim 22,

Slaughter teaches wherein step (a) includes predefining a command (see col. 16, lines 39-45 et seq).

As to claim 23,

Slaughter teaches wherein step (a) includes predefining a tag(see col. 16, lines 31-45 et seq).

As to claim 24,

Slaughter teaches wherein step (a) includes predefining a data (see col. 16, lines 31-45 et seq).

As to claim 25,

Slaughter teaches wherein step (c) includes performing an access control search (see col. 11, lines 2-15 et seq).

As to claim 26,

Slaughter teaches wherein step (c) includes deleting a portion of the extensible markup language file (get modified at to the contents of the message schema after the

gate is created, including deleting, adding, or modifying messages in the schema, see col. 20, lines 60-67, Slaughter).

As to claim 27,

Slaughter teaches wherein step (c) includes performing a translation of a portion of the extensible markup language file (the discovery service receive a string specifying something to locate, and it sends an XML message to a known discovery front-end, which then parses the string and makes a corresponding XML query to a search facility which may be an internet search facility, see col. 16, lines 39-46, Fig. 4, Slaughter).

Allowable Subject Matter

5. Claims 2-5, 7-8 and 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art or records does not fairly teach or suggest the combination of elements wherein comparing a search convergence depth to an access convergence depth; when the search convergence depth is equal to the access convergence depth, performing an intersection between the query search result and the access search result to form an intersection result; when the access rule is a hide command, the allowed search result is a non-intersecting result.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

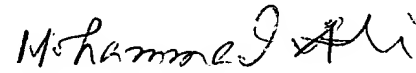
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (571) 272-4105. The examiner can normally be reached on Monday-Thursday (7:30 am-6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mohammad Ali
Primary Examiner
Art Unit 2167

MA
March 14, 2005